

Application Serial No.: 09/681,333
Attorney Docket No.: 57761.000161

CLAIM AMENDMENTS

Please enter the following amendments to the claims, which are presented in accordance with revised 37 C.F.R. §1.121.

1. **(Currently Amended)** A method for building an as-needed computer generated model, comprising the steps of:

storing a max-case model file relating to a max-case design model, wherein said max-case design model includes plurality of model sub-components;

extracting viewer-readable files for each of said plurality of model sub-components;

generating a max-case design script including retrieval information for each of said plurality of model sub-components;

receiving a user selection of ~~particular~~ as-needed model sub-components;

generating an as-needed design script including retrieval information for each of the as-needed model sub-components;

retrieving, in a model viewing application, the viewer-readable files for each of the as-needed model sub-components;

building the as-needed model from the retrieved viewer-readable files; and

displaying the as-needed model to the user.

2. **(Original)** The method of claim 1, wherein the step of generating a max-case design script further comprises the step of extracting location information for each of the model sub-components.

3. **(Original)** The method of claim 1, further comprising the step of storing said viewer-readable files in at least one computer-readable medium.

4. **(Currently Amended)** The method of claim 1, further comprising the step of storing said user selection of ~~particular~~ as-needed model sub-components in at least one computer-readable medium.

5. **(Currently Amended)** The method of claim 1, wherein at least the step of:

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extracting viewer-readable files for each of said plurality of model sub-components;
receiving a user selection of ~~particular~~ as-needed model sub-components; and displaying the
as-needed model to the user are completed at remote locations to each other.

6. (Original) The method of claim 5, wherein the remote locations are connected by a computer network.

7 (Original) The method of claim 1, further comprising the step of storing said viewer-readable files a VRML file format.

8. (Original) The method of claim 1, further comprising the step of storing said viewer-readable files in a TIFF file format.

9. (Original) The method of claim 1, further comprising the step of storing said max-case design script and said as-needed design script in an ASCII file format.

10. (Original) The method of claim 1, further comprising the steps of:

extracting spatial orientation information related to the three dimensional orientation of each of the model sub-components and including the spatial orientation information in the max-case design script;

receiving, from the user, sub-component placement and orientation information for each as-needed model sub-component; and

including within the as-needed design script, the received sub-component placement and orientation information.

11. (Original) The method of claim 10, wherein said spatial orientation information includes six degrees of freedom.

12. (Original) The method of claim 10, wherein said spatial orientation information includes coordinates for an angle of rotation about each of the x, y, and z axes, relative to a pre-established coordinate axes, and an offset in each of the x, y, and z directions relative to a predetermined model center point.

13 (Original) A method for building and displaying an as-needed computer generated model, comprising the steps of:

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receiving a selection of a plurality of model sub-components that, when assembled together, form the as-needed computer generated model;

executing an as-needed script readable by a model viewing software application and related to the selected plurality of model sub-components,

wherein the as-needed script includes retrieval information for each of the plurality of model sub-components;

retrieving, based upon said as-needed script, a plurality of viewer-readable files corresponding to the selected plurality of model sub-components;

building the as-needed computer generated model from the plurality of retrieved viewer-readable files in a model viewing software application; and

displaying the as-needed computer generated model in the model viewing software application.

14. (Currently Amended) A system for building an as-needed computer generated model, comprising:

a multi-dimensional modeling tool for generating and storing a max-case model file relating to a max-case design model, wherein said max-case design model includes plurality of model sub-components;

a sub-component extraction utility electronically connected to said multi-dimensional modeling tool for extracting viewer-readable files for each of said plurality of model sub-components;

a viewer utility electronically connected to said sub-component extraction utility for generating a max-case design script that includes at least retrieval information for each of said plurality of model sub-components;

a product configurator application electronically connected to said viewer utility for receiving a user selection of particular as-needed model sub-components; and

a viewer application electronically connected to said product configurator application and said sub-component extraction utility for generating an as-needed design script including retrieval information for each of the as-needed model sub-components, retrieving, the

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viewer-readable files for each of the as-needed model sub-components, building the as-needed model from the retrieved viewer-readable files; and displaying the as-needed model to the user.

15. (Original) The system of claim 14 wherein said viewer utility extracts location information for each of the model sub-components.

16. (Original) The system of claim 14, wherein said sub-component extraction utility stores said viewer-readable files in at least one computer-readable medium.

17. (Currently Amended) The system of claim 14, wherein said product configurator application stores said user selection of particular as-needed model sub-components in at least one computer-readable medium.

18. (Original) The system of claim 14, wherein at least said multi-dimensional modeling tool, said sub-component extraction utility, said product configurator application, and said viewer application are located at remote locations to each other.

19. (Original) The system of claim 18, wherein the remote locations are connected by a computer network.

20. (Original) The system of claim 14, wherein said viewer-readable files are stored in a VRML file format.

21. (Original) The system of claim 14, wherein said viewer-readable files are stored in a TIFF file format.

22. (Original) The system of claim 14, wherein said max-case design script and said as-needed design script are stored in an ASCII file format.

23. (Original) The system of claim 14, wherein:

said sub-component extraction utility further extracts spatial orientation information related to the three dimensional orientation of each of the model sub-components;

said viewer utility further includes the spatial orientation information in the max-case design script;

said product configurator application further receives, from the user, sub-component

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placement and orientation information for each as-needed model sub-component; and

said viewer application further includes, within the as-needed design script, the received sub-component placement and orientation information.

24. (Original) The system of claim 23, wherein said spatial orientation information includes six degrees of freedom.

25. (Original) The system of claim 23, wherein said spatial orientation information includes coordinates for an angle of rotation about each of the x, y, and z axes, relative to a pre-established coordinate axes, and an offset in each of the x, y, and z directions relative to a predetermined model center point.

26. (Original) A system for building and displaying an as-needed computer generated model, comprising:

a product configurator application for receiving a selection of a plurality of model sub-components that, when assembled together, form the as-needed computer generated model;

a viewer application for executing an as-needed script related to the selected plurality of model sub-components,

wherein the as-needed script includes retrieval information for each of the plurality of model sub-components;

said viewer application further retrieving, based upon said as-needed script, a plurality of viewer-readable files corresponding to the selected plurality of model sub-components;

said viewer application further building the as-needed computer generated model from the plurality of retrieved viewer-readable files in a model viewing software application; and

said viewer application further displaying the as-needed computer generated model in the model viewing software application.